## SLEW RATE LIMITED REFERENCE FOR A BUCK CONVERTER

## ABSTRACT OF THE DISCLOSURE

A compensated reference voltage for the controller of a buck regulator corrects for offsets and controls the rate at which the output load current can change in response to a change in the reference setting output voltage level of the buck converter. A current source is coupled to a resistor that has one terminal connected to the ground potential of the output voltage. The voltage across this resistor generates a remote reference voltage. A feedback current is generated as a function of the difference between the remote reference voltage and the output voltage. The feedback current is time integrated to form the compensated reference, which is used to control the ON-time of the buck converter.

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